

AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions and listings of claims in the application. Please cancel claims 2 and 12 without prejudice or disclaimer, and amend claims 1, 3-11, and 13-18, as follows:

1. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system, the system comprising a factory-side system having at least one semiconductor processing system, and a vendor-side system ~~owned~~ operated by an administrator who manages ~~[[the]]~~ maintenance of said semiconductor processing system,

wherein said factory-side system comprises:

a factory-side sending/receiving means which sends and receives information to and from said vendor-side system through a bidirectional network,

a preset means which stores at least one of

a predetermined allowable limit value of operation time, ~~or the~~

a predetermined number of operations of a part of said ~~[[preset]]~~

semiconductor processing system,

a normal operation time and an allowable limit value of the normal operation time, and

a time-passage change and an allowable limit value of the time-passage change;

a measuring means which measures actual operation time or ~~[[the]]~~ a number of actual operations of said part~~[[,]]~~; and

a maintenance judging means which compares said actual operation time or the number of actual operations and said predetermined allowable limit value

with each other to ~~judge~~ form a judgment of an operation state of said part, and which sends an order processing request of said part to said vendor-side system through said bidirectional network ~~[[by]]~~ via said factory-side sending/receiving means in accordance with a result of said judgment~~[[,]]~~; and

wherein said vendor-side system comprises:

a vendor-side sending/receiving means which sends and receives information to and from said factory-side system through said bidirectional network~~[[,]]~~; ~~and~~

an a part order processing means which ~~carries out~~ processes an order processing of a part when said vendor-side sending/receiving means receives an order processing request of ~~[[that]]~~ said part from said factory-side system through said bidirectional network; and

wherein said factory-side system stores at least two stage limit value levels as said predetermined allowable limit value which is previously set by said preset means, and when said maintenance judging means judges that said actual operation time or the number of actual operations reaches a first stage limit value level, said factory-side sending/receiving means sends an order processing request of a replacement for the part to said vendor-side system through said bidirectional network, and when said actual operation time or the number of actual operations reaches a second stage limit value level, said factory-side system carries out a notice processing.

Claim 2 (Canceled).

3. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system according to claim ~~[[2]]~~ 1, wherein

said vendor-side system estimates a time period required ~~until the level reaches~~ to reach a next the second stage limit value level ~~[[by a]]~~ via the part order processing means, and

if said vendor-side system judges that the replacement for the part can be ~~prepared~~ made available by ~~[[that]]~~ said time period and a periodic maintenance of said semiconductor processing system is scheduled by ~~[[that]]~~ said time period, maintenance schedule information for inputting ~~[[the]]~~ an exchange of the part into a ~~[[next]]~~ periodic maintenance schedule is sent to said factory-side system by said vendor-side sending/receiving means through said bidirectional network, and

if said factory-side sending/receiving means receives the maintenance schedule information, said factory-side system inputs the exchange of the part into ~~the next~~ said periodic maintenance schedule and ~~renews~~ updates said periodic maintenance schedule.

4. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system according to claim 3, wherein

said vendor-side system estimates the time period required ~~until the level reaches~~ to reach the next the second stage limit value level ~~by a part~~ via the part order processing means, and

if the vendor-side system judges that the replacement for the part ~~can not~~ cannot be ~~prepared~~ made available by ~~[[that]]~~ said time period required to reach the second

stage limit value level, the vendor-side system judges that ~~[[the]]~~ maintenance of the part ~~can meet the requirement~~ can be performed, and ~~[[when]]~~

~~if~~ the vendor-side system judges that the periodic maintenance of the ~~[[next]]~~ semiconductor processing system is scheduled by ~~[[that]]~~ said time period required to reach the second stage limit value level, maintenance schedule information for inputting the maintenance of the part into ~~a next~~ said periodic maintenance schedule is sent to said factory-side system ~~[[by]]~~ via said vendor-side sending/receiving means through said bidirectional network.

5. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system according to claim 1, wherein

the predetermined allowable limit value of operation time or the predetermined allowable number of operations of said part which is stored in the preset means of said factory-side system is a value based on a ~~counted~~ value ~~which is counted~~ by a counter ~~provided in correspondence with~~ corresponding to said part, and

said measuring means of said factory-side system measures the actual operation time or the number of actual operations of said part based on the ~~counted~~ value counted by the counter corresponding to said part.

6. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system according to claim 5, wherein

said measuring means measures the actual operation time of said part via the counter corresponding to said part by ~~a counter corresponding to said part as~~ measuring operation time of a part driving means which drives said part.

7. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system according to claim 1, wherein

the preset means of said factory-side system stores a normal operation time and ~~[[its]]~~ an allowable limit value of the normal operation time ~~instead of a allowable limit value of the operation time or the number of operations of said part,~~

said measuring means of said factory-side system measures the actual operation time of said part,

said maintenance judging means of said factory-side system compares the actual operation time of said part and the allowable limit value of the normal operation time of said part with each other to judge form a judgment of the operation state of said part, and

said factory-side system sends the order processing request of said part to said vendor-side system through said bidirectional network ~~by means of~~ via said factory-side sending/receiving means in accordance with a result of said judgment.

8. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system according to claim 1, wherein

the preset means of said factory-side system stores a time-passage change and ~~[[its]]~~ an allowable limit value of the time-passage change ~~instead of a allowable limit value of the operation time or the number of operations of said part,~~

said measuring means of said factory-side system measures time-passage change of the actual operation of said part ~~instead of the actual operation time or the number of actual operations of said part,~~

said maintenance judging means of said factory-side system compares the time-passage change of the actual operation of said part and the allowable limit value of the time-passage change of the normal operation to ~~judge~~ form a judgment of the operation state, and

said factory-side system sends the order processing request of said part to said vendor-side system through said bidirectional network ~~by means of~~ via said factory-side sending/receiving means in accordance with a result of said judgment.

9. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system according to claim 1, wherein

said factory-side system includes a factory-side server, said factory-side server includes said preset means, said measuring means, said maintenance judging means and said factory-side sending/ receiving means, and

said vendor-side system includes a vendor-side server, said vendor-side server includes said part order processing means and said vendor-side sending/receiving means.

10. (Currently Amended) A part maintenance system ~~[[of]]~~ for a semiconductor processing system according to claim 1, wherein

said factory-side system includes a factory-side server and a factory-side sending/receiving server, said factory-side server includes said preset means, said measuring means and said maintenance judging means, and said factory-side sending/receiving server includes said factory-side sending/receiving means, and

said vendor-side system includes a vendor-side server and a vendor-side sending/receiving server, said vendor-side server includes the part order processing means, and said vendor-side sending/receiving server includes said vendor-side sending/receiving means.

11. (Currently Amended) A part maintenance method in a part maintenance system ~~[[of]]~~ for a semiconductor processing system in which a factory-side system having at least one semiconductor processing system, and a vendor-side system ~~owned~~ operated by an administrator who manages ~~[[the]]~~ maintenance of said semiconductor processing system are connected to each other through a bidirectional network, said method comprising:

~~a step for~~ presetting at least one of

a predetermined allowable limit value of operation time, ~~or the~~

a predetermined number of operations of said semiconductor processing system ~~[[by]]~~ via said factory-side system,

a normal operation time and an allowable limit value of the normal operation time, and

a time-passage change and an allowable limit value of the time-passage change;

~~a step for~~ measuring actual operation time or ~~[[the]]~~ a number of actual operations of said part ~~[[by]]~~ via said factory-side system~~[[,]]~~;

~~a step for~~ comparing said actual operation time or the number of actual operations and said predetermined allowable limit value with each other ~~[[by]]~~ via said factory-side system to ~~[[judge]]~~ form a judgment of an operation state of said part, and

[[for]] sending an order processing request of said part to said vendor-side system through said bidirectional network in accordance with a result of the judgment[[,]]; and ~~a step for~~ carrying out the order processing request of said part when said vendor-side system receives the order processing request of [[the]] said part from said factory-side system through said bidirectional network,

wherein said predetermined allowable limit value which is previously set by said factory-side system is at least a two stage limit value, when said factory-side system judges that said actual operation time or the number of actual operations reaches a first stage limit value level, the order processing request of the part is sent to said vendor-side system through said bidirectional network, and when said factory-side system judges that the actual operation time or the number of actual operations reaches a second stage limit value level, a notice processing is carried out.

Claim 12 (Canceled).

13. (Currently Amended) A part maintenance method according to claim [[12]] 11, wherein

said vendor-side system estimates a time period required until the level reaches ~~a next~~ the second stage limit value level [[by]] via a part order processing means, and if said vendor-side system judges that a replacement for the part can be prepared made available by [[that]] said time period and a periodic maintenance of said semiconductor processing system is scheduled by [[that]] said time period, maintenance schedule information for inputting [[the]] an exchange of the part into ~~a next~~ the periodic

maintenance schedule is sent to said factory-side system through said bidirectional network, and

if said factory-side system receives the maintenance schedule information through the bidirectional network, said factory-side system inputs the exchange of the part into ~~the next~~ said periodic maintenance schedule and ~~renews~~ updates said periodic maintenance schedule.

14. (Currently Amended) A part maintenance method according to claim 13, wherein

said vendor-side system estimates said time period required ~~until the level reaches to reach~~ the ~~[[next]]~~ second stage limit value level ~~[[by]]~~ via a part order processing means, and if the vendor-side system judges that the replacement for the part ~~can not~~ cannot be ~~prepared~~ made available by ~~[[that]]~~ said time period, the vendor-side system judges that ~~[[the]]~~ maintenance of the part can ~~meet the~~ requirement be performed, and ~~[[when]]~~

if the vendor-side system judges that the periodic maintenance of the ~~[[next]]~~ semiconductor processing system is scheduled by ~~[[that]]~~ said time period, maintenance schedule information for inputting the maintenance of the part into ~~a next~~ said periodic maintenance schedule sent to said factory-side system through said bidirectional network.

15. (Currently Amended) A part maintenance method according to claim 11, wherein

~~[[a]]~~ the predetermined allowable limit value of operation time or the predetermined number of operations of said part which is stored in said factory-side system is a value based on a ~~counted~~ value ~~which is counted by a counter provided in~~ ~~correspondence with~~ corresponding to said part, and

actual operation time or the number of actual operations of said part is measured by said factory-side system based on the ~~counted~~ value of the counter corresponding to said part.

16. (Currently Amended) A part maintenance method according to claim 15, wherein

the actual operation time of said part is measured ~~[[by a]]~~ via said counter corresponding to said part ~~[[as]]~~ based on operation time of a part driving means which drives said part.

17. (Currently Amended) A part maintenance method according to claim 11, wherein

said factory-side system stores a normal operation time and ~~[[its]]~~ an allowable limit value of the normal operation time ~~instead of a allowable limit value of the operation time or the number of operations of said part,~~

said factory-side system measures the actual operation time of said part,

said maintenance judging means of said factory-side system compares the actual operation time of said part and the allowable limit value of the normal operation time of said part with each other to ~~[[judge]]~~ form a judgment of the operation state of said part, and

said factory-side system sends the order processing request of said part to said vendor-side system through said bidirectional network in accordance with a result of said judgment.

18. (Currently Amended) A part maintenance method of a semiconductor processing system according to claim 11, wherein

said factory-side system stores a time-passage change and ~~[[its]]~~ an allowable limit value of the time passage change ~~instead of a allowable limit value of the operation time or the number of operations of said part,~~

said factory-side system measures time-passage change of the actual operation of said part ~~instead of the actual operation time or the number of actual operations of said part,~~

said factory-side system compares the time-passage change of the actual operation of said part and the allowable limit value of the time-passage change of the normal operation to ~~[[judge]]~~ form a judgment of the operation state of said part, and

said factory-side system sends the order processing request of said part to said vendor-side system through said bidirectional network in accordance with a result of said judgment.